# Predicates And Heads in Irish Clausal Syntax \*

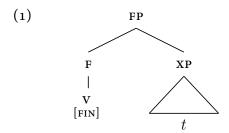
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This paper examines the interaction between the processes that determine verb initial order in Irish finite clauses and the processes that determine predicate-initial order in verbless clauses. It argues that, regardless of how predicate initial order is determined in verbless clauses, a head movement must be postulated which raises at least adjectival heads (and optionally prepositional heads) from the predicate to a higher inflectional position. The relevant evidence comes from patterns of ellipsis and coordination. The larger context for this discussion is the issue of whether verb initial order (in Irish) should be derived by head movement or by remnant VP movement.

<sup>\*</sup>This is a lightly revised and expanded version of a paper which appeared in 2005 in the volume *Verb First: On the Syntax of Verb-Initial Languages*, edited by Andrew Carnie, Heidi Harley and Sheila Ann Dooley, John Benjamins, pp 155–174. I am grateful to Julie Legate for commentary on a very early draft. Comments from Andrew Carnie, Heidi Harley and two anonymous reviewers on the pre-final draft were also extremely helpful. The research reported on here was supported by the National Science Foundation, via Project No. BCS-0131767.

### Introduction

Two lines of thought have dominated recent thinking about the syntax of vso languages and of vso clause-structure. An older tradition holds that this clause-type reflects raising of the finite verb to a position higher than, and to the left of, the subject. This view assumes the kind of structures seen in (1):



where F is some closed-class category in what Rizzi (1997) has called the inflectional layer. F is typically identified with a Tense node and XP is a category which (properly) contains VP, including all of its arguments and adjuncts. V raises to combine with F and form a complex head (a so-called 'finite verb').

A more recent line of thought explores the idea that verb initial order reflects the operation not of head movement but rather of phrasal movement. Specifically, vso order results when a VP is first voided of all its phrasal subconstituents, and is then fronted to a left-peripheral position within the inflectional layer. vso structures, on this view, are as shown schematically in (2):

(2) 
$$\begin{bmatrix} TP \begin{bmatrix} VP t & V & t \end{bmatrix} & DP & XP \end{bmatrix} \end{bmatrix}$$

Here, the arguments of v (DP and xP of (2)) have been extracted from vP before it is fronted. vP fronting thereby mimics (in terms of linear order) an application of (mere) v fronting.

This line of analysis emerged independently in work by Felicia Lee, by Diane Massam, and by Lisa Travis and Andrea Rackowski (see for instance the contributions of these authors to Carnie and Guilfoyle (2000) and the editors' introduction in the same volume). The work of investigating this idea has led to a rich vein of research and discussion of the relative merits of the two approaches preoccupied the workshop at the University of Arizona out of which the present volume grew (see, for instance, the contributions of Chung, Holmer, Massam, Oda, and Otsuka to the present volume). That debate in turn has a larger context, in that it represents one subtheme in a more general debate about the relative roles of head movement and remnant movement in the determination of word order possibilities.

One of the attractive features of the VP fronting analysis has been the understanding that it seems to make available of a correlation which apparently holds in many verb initial languages. Specifically, what is found in these languages is not so much verb initial order as predicate initial order more generally. However, the nonverbal predicates which occur in initial position are phrases rather than heads. These observations can be brought together

by way of two assumptions:

- ▷ In these languages, phrasal predicates front to initial position (perhaps under EPP pressure, however understood)
- ▷ In the case of vp, but not in the case of the other phrasal categories, all non-head subconstituents must be moved out before predicate fronting applies.

As long as a reasonable understanding of the second postulate can be constructed (why should VP differ from other phrase-types in this way?), the XP-fronting analysis provides a way of understanding why there should be a correlation between vso order and the initial position of predicative phrases in verbless clauses. The head movement analysis seems to provide no basis for understanding why such a correlation should hold.

A presupposition that runs through much recent discussion of these issues is that the two modes of analysis (verb-raising and remnant predicate fronting) are mutually exclusive alternatives—one or the other must be the right account of verb initial order (for a given language, if not in general). The present paper challenges that presupposition. It tries to establish the following claim for one verb initial language (Irish): even if the positioning of non-verbal predicates reflects application of a rule of (phrasal) predicate fronting, one must still postulate head movement to account for the ultimate position of the finite verb. With that conclusion established, though, it is not obvious what explanatory role the assumption of predicate fronting plays in the understanding of verb initial order.

The second half of the paper probes these issues further, using the following logic. If we can establish that head movement is what places verbs (and, as it turns out, other kinds of predicate heads) in initial position in finite clauses, then we should assume that that instance of head movement meets whatever conditions hold generally of head movement. But that expectation in turn provides us with a way of narrowing the hypothesis-space for the analysis of predicate initial order. If there is movement of the head of such a predicate to a higher position, then the predicate had better not occupy a position from which head movement is known to be impossible. We thus have a way of eliminating certain analytical possibilities: those which imply impossible head movements. When we follow this reasoning down, what emerges is the following disjunctive (but still useful) conclusion: either there is no predicate fronting at all in Irish, or else predicate fronting is not EPP-driven.

The larger moral, it seems to me, is that the hypothesis of predicate fronting does not, in fact, provide (initial appearances notwithstanding) an understanding of the kinship between verbal and verbless clauses in Irish. Furthermore, the hypothesis of predicate fronting is not obviously useful in accounting for verb initial orders in the language. Obviously this (tentative) conclusions implies nothing about the usefulness of predicate fronting analyses for other languages.

## A Further Step

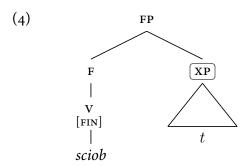
One of the ways in which head movement analyses of Irish have been useful has been in the kind of understanding that they yield of a very productive ellipsis process in the language,

one that elides all of a finite clause but the verb. This process is at work in the following dialogue:

- (3) a. Sciob an cat an t-eireaball de-n luch. snatch.past the cat the tail from-the mouse "The cat cut the tail off the mouse."
  - b. A-r sciob?

    c.q-past snatch.past
    "Did it?"
  - c. Creidim gu-r sciob. believe.pres-s1 C.past snatch.past "I believe it did."

In (3b) and (3c), nothing survives of the finite clause but the finite verb. When this process is examined in detail, it turns out to mimic all the properties (formal and interpretive) of vP-ellipsis in English (McCloskey (1991)). In the context of the head movement analysis, it can be understood as ellipsis of the complement of the functional head to which v raises – that is, ellipsis, of xP in (4):



On this view, the finite verb 'survives' ellipsis because it has raised out of the elided phrase prior to its elimination. And it, in turn then, functions as the required lexical licenser (head governor) for the ellipsis (McCloskey (1991), Fiengo and May (1994), McCloskey (2003)). Similar ellipsis processes are attested in Modern Hebrew (Doron (1999), Sherman/Ussishkin (1998), Goldberg (2002, 2003)), Ndendeule (Ngonyani (1996)), Portuguese, and Gallego (Martins 1994, 2000). This analysis provides an understanding of the basic properties of the Irish construction and places it in a reasonable typological context. We can maintain that:

- ▷ In English, main verbs do not raise and so never survive vp-ellipsis. In Irish, they do, and therefore survive ellipsis;
- ▷ In Irish, subjects do not raise out of the complement of F, and so do not survive vpellipsis;
- ▷ Irish, Hebrew and Ndendeule are alike with respect to the first property; Irish differs from Hebrew and Ndendeule only in the second property;
- ▷ In Irish, there is no raising of v in non-finite clauses and there is therefore no vp-ellipsis in non-finite clauses.

If we were to adopt a VP fronting analysis of Irish vso clauses, we would presumably say that what this ellipsis involves is elision of the complement of the head which attracts the VP-predicate. The relevant head on this analysis will be null, and so it is less clear how the ellipsis is licensed. But that is not an issue which we need dwell on here. The crucial questions rather concern how ellipsis applies in clauses headed by nonverbal predicates.

In answering those questions, it will be useful to first review some basic properties of nonverbal clauses ('copular clauses') in Irish. These structures have been the focus of a great deal of work: Stenson (1981): Chap. 3, Ó Sé (1987), Ó Sé (1990), Carnie (1995), Doherty (1996), Legate (1997), Carnie (1997), Doherty (1997a), DeGraff (1997), Doherty (1997b), Legate (1998), Carnie (2000), Adger and Ramchand (2003)) They are exemplified in (5):

- (5) a. Is comhartha go bhfuil muid pósta an mhalairt fainní seo.

  COP.PRES Sign C be.PRES we married the exchange rings.GEN DEMON

  "This exchange of rings is a sign that we are married."
  - b. Is cosúil le taibhse é.

    COP.PRES like with ghost him
    "He is like a ghost."
  - c. Is de bhunadh na h-Eireann í.

    COPPRES OF people the.GEN Ireland.GEN her

    "She is of Irish extraction."

In the three examples of (5), one can see an NP-predicate, an AP-predicate, and a PP-predicate respectively, preceded by the element is, which in the Irish grammatical tradition is known as the 'copula'. This element must be distinguished from the substantive verb bi –very similar to the verb 'be' in English — whose morphosyntax is fully verbal, whose syntax, on the surface at least, is very different indeed from that of (5) and whose semantics (stage level rather than individual level predication) is also different:

(6) Tá Eoghnaí thíos ar an tráigh. be.pres down on the beech "Eoghnaí is down on the beach."

Schematically, then, the structure we are concerned with is that in (7):

(7) [COP XP DP]

where XP can be any of NP, AP, or PP, and DP appears in the accusative (or common) case. In

<sup>&</sup>lt;sup>1</sup>Two cautionary notes: First: it is sometimes claimed that only NP is productive in the XP slot of (7), and that the AP-type is lexically and idiosyncratically restricted. I do not know what the empirical basis for this claim is. A quick search of a data-base of attested examples turned up 64 different adjectives in the construction in (7). Second: I follow custom in assuming that nominal predicates are of category NP. This is not obviously consistent with the existence of examples like (i) and (ii):

<sup>(</sup>i) Ní aon bhligeardaithe iad COP.NEG any blackguards them "They are no blackguards."

semantic terms, the individual level property denoted by XP is predicated of the entity which the DP refers to (abstracting away from numerous complexities).

A thread which runs through almost all discussion of the syntax of (7) is the idea that the copula itself is an instance of the category T – the inflectional head which provides a specification of Tense and Mood for the sentence (or at least that it occupies the T-position by the end of the derivation). This analysis makes sense of the fact that the copula shows the same tense distinctions (present versus past/conditional) as other plausible candidates for the T-position such as preverbal tense-markers, and furthermore that there are many varieties in which the past tense form of the copula is identical to the more general past tense marker (in the Irish of Clear Island, County Cork, for instance):

(8) a. do cheart dúinn guí chun Dé

COP.COND right to-us pray.NON-FIN to God.GEN

"We should pray to God."

O Buachalla (2003): 85

b. do mhairbh sé é

PAST- kill he it

"He killed it."

Ó Buachalla (2003): 69

The copula seems also to be distinct from other left-peripheral heads, like complementizers and markers of negation (although see Carnie (1995) for a different view). The syntactic facts here are obscured by morphophonological processes which tend to often fuse these insubstantial elements together. However, it is not difficult to find contexts in many dialects in which the copula is clearly distinguished from such elements (see (9)–(13)) and in these cases, the copula always appears to the right of elements from the c-system (as one would expect if it were an inflectional head).

(9) dá ba Ghearmánach é
if cop.cond German him
"if he were a German" Ó Sé (2000): 356

(10) má 's fíor an ghloine if COP.PRES true the glass "If the barometer is accurate" Ó Sé (2000): 355

(11) an rud a b- ionann agus teip the thing c.wh cop.past same as failure "something that was tantamount to failure" SD 209

(ii) Is dhá rud éagsúla iad.

COp. Pres two thing different-pl. them

"They are two different things."

Doherty (1997b): 139

Probably what needs to be said is that xP of (7) must be property-denoting (of type <e,t>) and that this requirement is consistent with the appearance in nominal copular clauses of some, but not all, of the functional structure in the extended nominal projection.

(12) An mb' fhiú a ghoil ann? c.q cop.cond worth go.non-fin there "Would it be worth going there?"

Ó Baoill (1996): 62

(13) ní -bh fhada bhuatha é c.neg.fin cop.past far from-them it "It wasn't far from them."

Ó Sé (2000): 349

Given this much, we can refine (7) to (14):

(14) 
$$[(C)$$
 (NEG) T XP DP  $]$ 

(where XP is individual level) and the challenge is to understand how such structures might be composed and how they might relate to verbal clauses.

There is a final observation which will be helpful in setting the stage for the discussion that is to follow. When XP of (14) is headed by an adjective which takes a single CP-argument, then DP is often absent – either not present at all, or phonologically null.<sup>2</sup>

(15) a. Is cinnte go bhfuil an fear leigheasta.

COP.PRES certain c be.PRES the man cured

"It is certain that the man is cured."

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b. Is breá éisteacht le máistrí léinn cop.pres fine listen.non-fin with masters learning.gen "It's nice to listen to masters of learning."

For these structures, the natural assumption is that the adjective in question takes a single (clausal) argument as its complement (an assumption which will be of some importance at a later point in the discussion).

The examples in (15) alternate with those in (16), in which a dummy pronoun appears to occupy the DP-position of (14) and in which the clausal argument appears in absolute right-peripheral position:

- (16) a. Is cinnte é go bhfuil an fear leigheasta.

  COP.PRES certain it c be.PRES the man cured

  "It is certain that the man is cured."
  - b. Is breá é éisteacht le máistrí léinn coppres fine it listen. Non-finr with masters learning. GEN "It's nice to listen to masters of learning."

AG 115

The alternation seen in (15) versus (16) raises a number of interesting and complex questions having to do with the status of the EPP and the status of expletives in Irish. For our immediate purposes, these questions need not be resolved. We will see evidence at a later point in the

<sup>&</sup>lt;sup>2</sup>Notice that the existence of these structures raises questions about whether or not the syntax in (14) is always linked with the semantics of predication in any nonvacuous sense.

paper for the complement status of the CP-arguments in (15).

With this much as background, we can go back to the basic question raised earlier – how does the ellipsis process of (3c) apply in the case of predicative copular clauses? The answer is that it applies differently depending on the category of the predicate (Ó Siadhail (1973): 149–150, Ó Siadhail (1989): 245–249, Ó Baoill (1996): 60–63). Consider first the case of AP-predicates. The pattern we see here is the one illustrated in (17):

- (17) a. An cosúil le taibhse é? c.q like with ghost him "Is he like a ghost?"
  - b. Is cosúil.

    COP.PRES like

    "He is."
  - c. \*Is cosúil le taibhse.

    COP.PRES like with ghost

    "He is."
- (18) a. Na-r cheart do Mháire a bheith ann?

  C.NEG.Q.PAST right to Maire be.NON-FIN there "Shouldn't Máire be present?"
  - b. Cha-r cheart.

    C.NEG-PAST right

    "She shouldn't."

Ó Baoill (1996): 61

- c. \*Cha-r cheart dithe.

  C.NEG-PAST right to-her

  "She shouldn't."
- (19) a. An fíor go rabh cás cúirte le déanaí agat?

  c.Q true c be.past case court.gen recently at-you

  "Is it true that you were recently involved in a court case?"
  - b. Is fior. coppres true "It is."

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- (20) a. An ionann agus teip é?

  c.Q identical as failure it

  "Is it tantamount to a failure?"
  - b. Ní h-ionann.

    cop.neg identical

    "It's not."
  - c. \*Ní h-ionann agus teip.

    COP.NEG identical as failure

    "It isn't."

What is important about (17)–(20) is that the pattern observed is essentially that found with

finite verbs; that is, the adjective alone (the head) may and must survive ellipsis. The larger predicate (the head along with its arguments and adjuncts) cannot survive.

Nominal predicates behave differently. The question in (21) can be answered as in (22a), but not as in (21b) or (21c).

- (21) An duine de na fearaibh é?
  c.q person of the men him
  "Is he one of the men?"
- (22) a. Is ea.

  COP.PRES

  "He is."

  b. \*Is duine.

  COP.PRES person

"He is."

c. \*Is duine de na fearaibh.

COP.PRES person of the men

"He is."

The element ea in the grammatical (22a) (pronounced variously [a], [e:], [ $\Theta$ w] or [ $\Theta$ y] and spelled either with or without a final -dh) is an invariant element whose only function is to support the copula (which is a prosodically dependent proclitic) if it otherwise would have nothing to be dependent on. It also appears, for instance, when the predicative XP undergoes  $\overline{A}$ -movement:

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(23) a.
          Cumadóir ceoil
                              is
                                         ea _ é
          composer music.gen c-cop.pres
                                              him
          "It's a composer of music that he is."
     b.
               Chorcaigh is
                                    ea _ iad
          from Cork
                                         them
                          C-COP.PRES
          "It's from Cork that they are."
                                                                  Ó Buachalla (2003): 84
         linne is
                            ea _ an tigh seo
                                                  feasta
          with-us c-cop.pres
                                 the house demon from-now-on
          "It's to us that this house belongs from now on."
                                                                  Ó Buachalla (2003): 84
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d. de-n RIC a -b ea \_ cuid mhaith de s-na hoifigigh of-the c.wh corpast proportion good of the officers "It was to the RIC that a large proportion of the officers belonged." UIMH 4

The crucial contrast between adjectival and nominal predicates then is this: when ellipsis applies to an adjectival predicate, the head and the head alone survives (it both can and must survive). When ellipsis applies to a nominal predicate, nothing survives, not even the head.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup>There are conservative varieties of Cork and Donegal in which nouns and adjectives pattern alike with respect to stranding under ellipsis:

The facts about PP-predicates are more complex, in ways that are not well understood at present. They exhibit both of the patterns seen above (see Ó Siadhail (1989): 246–247, Ó Baoill (1996): 60–62). The 'nominal pattern' (in which the head does not survive ellipsis and invariant *ea* provides prosodic support for the copula) is available, as illustrated in (24):

'S (24) a. An leob an capall bán sin? eadh, go cinnte C.Q with-them the horse white DEMON COP.PRES certainly "Does that white horse belong to them? It certainly does." PCF 161 Éirinn thusa? An as Is ea, cinnte. c.q from Ireland you certainly COP.PRES "Are you from Ireland? I certainly am." CM 25

In other cases, however, PP-predicates behave like adjectives, in that the bare preposition (in its agreeing form if it is an agreeing preposition) survives the ellipsis process:

- (25) a. an ndeir tú liom go mb' as Inis Gé Sail Óg Rua? B' as c.q say you to-me c coppast from coppast from coppast from-it cinnte. certainly "Are you telling me that Sail Óg Rua was from Inis Gé? She certainly was."
  - b. An mar a chéile iad? Is mar. c.o like each-other them coppres like "Are they the same? They are."

Interpreting these facts is made difficult by a number of complicating factors – the prosodic lightness of many prepositions, the syntactic status of agreeing prepositions, the possibility that many apparently prepositional predicates may in fact be null-headed nominal predicates (see (5c), for example). But the minimal contrast between (24b) and (25a) suggests strongly that for PP-predicates, at least in a range of cases, two patterns are systematically available – the nominal pattern, in which the head does not survive ellipsis and the copula is supported by invariant *ea* (as in (22a)), and the adjectival-verbal pattern, in which the head of the predicate, and the head alone, survives ellipsis. The discussion of Ó Baoill (1996): 60–62 suggests the same conclusion, in that both answer-types are cited systematically there for examples involving PP-predicates.

How should these patterns be understood? I will set aside the complexities around PP predicates for the moment, and focus on the contrast between adjectives and nouns. The possibility of short answers like (17)–(20) (which are of the form [(c) COP A]) shows that

This pattern of variation suggests that the noun adjective contrast seen in most varieties does not run deep. For the varieties which have (i), the argumentation in the text extends to nominal predicates.

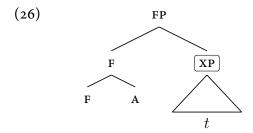
<sup>(</sup>i) an fil' é seo a thá anseo? Is fil'.

C.Q poet him DEMON C.WH be.PRES here COP.PRES poet

"Is this person that is here a poet? He is."

LSUE 287

adjectives in nonverbal clauses must occupy a position sufficiently high that they are outside the constituent targeted by ellipsis (xp of (4)). Complements of the adjectival head, however, must remain within that constituent. Given the assumptions which undergird the analysis of this ellipsis process in general, it also now follows that the heads of predicative Ap's must be subject to a requirement that they raise. To account for the contrast between (17b) and (17c), for instance, it it crucial that this raising be head movement rather than phrasal movement. The natural conclusion seems to be that adjectives (like verbs) raise to the functional head which licenses ellipsis (F of (4)). This is illustrated roughly in the schematic structure of (26):



where we can assume that F is T, and that the boxed XP is the target of ellipsis, containing in turn the AP-predicate as a subpart. It is hardly a great surprise that verbs and adjectives should pattern alike in such respects, given other well-known patterns of similarity between the two categories.

Nouns, by contrast, must occupy a position low enough that they are trapped (with their syntactic dependents) within the elided constituent and so do not survive. This outcome can only be guaranteed if nouns are not subject to the requirement of head raising which determines the ultimate position of verbs and adjectives.

The proposed distinction between adjectival and nominal predicates is supported by a further contrast having to do with coordination patterns. Consider (26):

- (27) a. Is ceart agus is cóir teacht i gcabhair ar do chomharsa.

  COP.PRES right and COP.PRES proper come.Non-fin in aid on your neighbor "It is right and proper to help one's neighbor."
  - b. \*Is ceart agus cóir teacht i gcabhair ar do chomharsa.
  - c. \*Is cosúil le taibhse agus éagosuil le duine saolta é.

    COPPRES like with ghost and unlike with person living him

    "He is like a ghost and unlike a living being."

Adjectival heads may not be coordinated independent of the copula; the copula must rather attach to both. This I take to be a reflection of the general requirement that an element may not be coordinated independent of its morphophonological dependents (a reflection in turn ultimately of the Coordinate Structure Constraint). Exactly similar facts hold for verbs:

(28) a. Deir siad gu-r cheannaigh agus gu-r dhíol siad na tithe. say they c-past buy.past and c-past sell.past they the houses "They say that they bought and sold the houses."

b. \*Deir siad gu-r cheannaigh agus dhíol siad na tithe.

Compare (28b) with its fully well-formed English counterpart in (29):

(29) They say that they bought and sold the houses.

Once again, nominal predicates behave differently:

(30) Is cumadóir ceoil agus scríobhneoir nótálta é.

COP.PRES composer music.GEN and writer noted him

"He is a composer of music and a noted writer."

These observations can be understood in the same terms as those involving ellipsis. If AP predicates are subject to a requirement that their head must raise and incorporate into the higher inflectional head, then (27b) is impossible because either the required raising has not taken place (leading to an ill-formed outcome), or else raising has applied from the left conjunct only, in violation of the Coordinate Structure Constraint (also leading to an ill-formed outcome). For (27a), the best we can do at present is to assume a derivation in terms of Right Node Raising of the complement CP. Whether or not that turns out ultimately to be adequate, the important point for present purposes is the contrast between (27b) and (30), and the more general point that the impossibility of (27b) reflects the general requirement that coordinated elements must bring with them to the coordination all of their phonological dependents. For nominal predicates, there is no raising requirement and so (30) is possible (in contrast to (27b) and to (29b)).

To capture this pair of contrasts, then, we need to assume that, despite the fact that both AP-predicates and NP-predicates appear in initial position, there is an important difference between them. The head of AP, but not the head of NP, undergoes an additional (head-raising) step. The landing site for this movement seems to be the same as the landing site of the finite verb, since, with respect to the phenomena we are dealing with, raised adjectives pattern identically with raised verbs.

If we assume, as is common, that the head-position to which verbs raise is T, then we have the patterns schematized in (29):

(31) a. 
$$[_{TP} T [_{AP} \dots A \dots ]] \implies [_{TP} T + A [ \dots \emptyset \dots ]]$$
  
b.  $[_{TP} T [_{NP} \dots N \dots ]] \implies [_{TP} T [ \dots N \dots ]]$ 

For PP-predicates, we will assume that head-incorporation is optional:<sup>4</sup>

<sup>&</sup>lt;sup>4</sup>Heidi Harley notes an intriguing possible connection between the optionality of preposition-incorporation in these cases in Irish and the optionality of particle movement in English (*write your solution up on your own* versus *write up your solution on your own*), which might well also involve, as she points out, optional incorporation of a preposition.

When incorporation does not apply but ellipsis does, *ea* is inserted before the ellipsis-site (or trace), by way of mechanisms that seem to be identical to the last-resort mechanism which inserts *do* under similar circumstances in English. That is, the English paradigm in (33)–(35) and the Irish paradigm in (36)-(38) seem to be parallel point for point. In both languages the supporting element (*ea* in Irish, *do* in English) must be inserted before an ellipsis-site or a trace and only when head raising does not apply. And the English contrasts between (33) and (35) seem to be parallel to the Irish contrasts between (36) and (38).

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(33) a.
                    [_{\rm VP} applied for the position].
          *She did [_{VP} apply for the position].
     b.
           Indeed she did [VP
     c.
                                     ...
     d.
          *Indeed she [VP
                 and [VP] open the door ] she did [VP]
                                                                      ].
(34) a.
     b.
                 and [VP open the door ] she
                                                                      ].
(35) a.
           She is [_{VP} - [_{AP}]
                               very competent
                                                     ]].
     b.
           She is [_{VP} \ \_ \ [_{AP}
                                                     ]].
(36) a.
           Is
                       cumadóir ceoil
                                              é.
           COP.PRES
                       composer music.gen him
           "He is a composer of music."
          *Is
                    ea cumadoir ceoil
     b.
                                              é.
                       composer music.gen him
           "He is a composer of music."
     c.
           Is
                    ea [XP
                                              ].
           COP.PRES
           "He is."
          *Is
                                              ].
     d.
                       [_{XP}
           COP.PRES
           "He is."
                                                                     ] é.
(37) a.
           Cumadóir ceoil
                                  is
                                           ea [<sub>NP</sub>
           composer music.gen cop.pres
           "It's a composer of music that he is."
          *Cumadóir ceoil
                                  is
                                                                     ] é.
           composer music.gen cop.pres
           "It's a composer of music that he is."
(38) a.
                    cosúil
                                    taibhse é.
           COP.PRES like
                              with ghost him
           "He is like a ghost."
     b.
           Is
                    cosúil
                                               ].
                              [_{XP}
           COP.PRES like
           "He is."
```

This all seems like a reasonably coherent account of a fairly complex body of comparative observation.

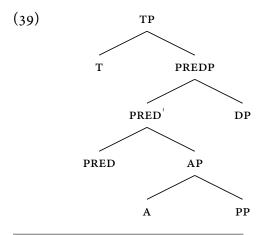
It follows from this conclusion in turn, though, that predicate fronting, even if extended to the case of VP, cannot provide a complete account of vso order in finite clauses. What we have just established is that the position occupied by initial phrasal predicates is not such that it can, without further elaboration, provide an understanding of the crucial patterns of ellipsis and coordination. The further elaboration required seems to be head movement – raising of an adjectival or verbal head to a higher inflectional position.

When we get to this point, though, it is not clear what explanatory role the hypothesis of VP fronting might play in the account of vso order in verbal clauses. The real burden of explaining verb initial order in finite clauses falls not on the hypothesis of XP fronting, but rather on the hypothesis of head movement. The origin-site of that movement could just as easily have been the base position of V as its position within a fronted VP.

### THE POSITIONING OF INITIAL PREDICATES

We can go a little farther in the deductive process. Say we accept the conclusion from the preceding section that v, A, and P undergo head movement to an initial position in finite clauses – the first two obligatorily, the last optionally. It follows that the origin site and the landing site of that movement must be in such a relation that head movement will be legal. Under what conditions will this be true?

One proposal which is fully consistent with the observations of the first half of the paper is that of Doherty (1996) for Irish and Ramchand (1996) for Scots Gaelic that there is no predicate fronting in these structures, but rather that the 'subject' DP occupies a rightward specifier position. A simple version of this proposal would assume the structure in (39) for a case of AP-predication.<sup>5</sup>



<sup>&</sup>lt;sup>5</sup>I will set aside for the moment the possibility that there is raising from the most prominent position within the lexical projection to the specifier of PredP. For some relevant observations, see (16) above.

The head movements that must be postulated here are movement from A to PRED, and from PRED to T — all of a very routine and well-attested type. Ellipsis is ellipsis of the complement of T, (or perhaps of the complement of Pred),  $^6$  licensed in turn by the presence of appropriate lexical material in T. PRED might well be the position into which the invariant element ea is inserted when it is needed to license ellipsis or a trace of  $\overline{A}$ -movement.

And given (39), the command relations are straightforwardly as they ought to be (as observed originally in Doherty (1996)). This is illustrated for Condition A effects in (40) and for Condition C effects in (41).

(40) a. ba cuid d- a chéile sinr coppast part of each-other us "We were part of each other."

AO 82

b. Ba gar d- a chéile na bailteacha.

COP.PAST close to each-other the towns

"The towns were close to each other."

STL 216

c. ba chomharsain mhaithe dh- a chéile iad coppast neighbors good to each-other them "They were good neighbors to each other."

BOM 4

- (41) a. Is gar i ngaol dá chomharsa béal dorais Eoghnaí.

  COP.PRES close in kinship to-his neighbor next-door

  "Eoghnaí is closely related to his next-door neighbor."
  - b. \*Is gar i ngaol do chomharsa béal dorais Eoghnaí é.

    COP.PRES close in kinship to neighbor next-door him
    "He is closely related to Eoghnaí's next-door neighbor."

Although I know of no considerations internal to Irish which tell against this proposal, work on Irish predicational structures since Doherty (1996) has been unanimous in assuming that it is wrong. The consensus has been rather that the initial position of xp-predicates is to be accounted for in terms of predicate fronting of one kind or another. The objection normally raised against (39) is that it involves the postulation of a rightward specifier, something which is widely thought to be at odds with typological expectation and with the effort to develop restrictive theories of phrase structure and constituent ordering.

It is not clear to me how much weight to give these considerations, but we can, in any case, go a little farther in the deductive process internal to Irish. Say we accept for purposes of argument the consensus view that specifiers may appear only to the left of their sister constituents. We are now assuming therefore that the surface position of phrasal predicates is a consequence of predicate fronting of some kind. On this view, (40) and (41) will be understood in terms of the mechanisms of reconstruction (Carnie (1995), Legate (1997),

<sup>&</sup>lt;sup>6</sup>On this alternative, licensing of the ellipsis will work as in an English case like (i):

<sup>(</sup>i) She will apply for the senior position. Will she?

<sup>&</sup>lt;sup>7</sup>I use reciprocals to illustrate the effects of Binding Condition A, because the existence of salient logophoric readings for reflexives creates difficult confounds.

Carnie (2000): esp. fn. 29), or perhaps by postulation of a subject trace within the fronted predicate, as in Huang (1993).

For the observations reviewed in the previous section, it is crucial that the predicative XP land in a position from which movement of its head to a higher head-position will be legal. In the context of theoretical frameworks which assume a Freezing Principle, by which all moved phrases become opaque for further movement of their subparts, there seems to be no way to permit such a possibility.

In more permissive frameworks, the options are still severely limited. There seem to be three ways in which we might understand the derived position of the raised predicative phrase:

- (i) it is a phrasal adjunct
- (ii) it is in a specifier position
- (iii) it adjoins to the attracting inflectional head

Adjunction does not seem to be an option, since further head movement out of the fronted predicate should be a violation of the Adjunct Island Condition. The other two options are in fact the ones that have been explored and proposed in the relevant literature (see the papers by Oda, Holmer, and Otsuka in the present volume) – either predicate fronting is movement into a head position, or else it is movement into a specifier position. The first of these two options is pursued in Carnie (1995, 1997, 2000) (though withdrawn in more recent work). The second option has been widely adopted for Irish (Doherty (1997a), Legate (1997), Lee (2000), Massam (2000), Rackowski and Travis (2000)) and for very similar data in Scots Gaelic by Adger and Ramchand (2003). A similar hypothesis has been widely proposed for predicate fronting in verb initial languages more generally (see, for instance Massam 2000, 2001, Lee 2000, Rackowski and Travis 2000)). This option is most usually associated with the idea that the movement in question is driven by the EPP, and that it therefore targets the specifier of TP. Much of this discussion has, in fact, been framed within a larger set of speculations about the nature of the EPP, and about modes of satisfaction of the EPP.

But at this point we have a dilemma. Further head movement of the kind documented in the first part of this paper should not be possible from within the specifier of TP. A phrase in the specifier position of TP is neither a complement nor (in the general case) the specifier of the complement of an L-related head. That phrase should therefore be an island (a subject island, in effect), and head movement originating from a position within it should be severely degraded (Baker (1988), Lightfoot and Hornstein (1994), Koopman (1994), Uriagereka (1994)). In English, the relevant examples are indeed so bad that they are parsable only by those trained in the dark arts of syntax:

- (42) a. ?Will that we are lying be really obvious?
  - b. \*Are that we \_ lying will be really obvious?

<sup>&</sup>lt;sup>8</sup>Uriagereka (1988,1994) discusses a case in Galician in which D cliticizes from the subject of an embedded TP or small clause onto a governing perception verb, but crucially not to a governing complementizer. The analysis is that the perception verb directly selects TP, rendering its specifier transparent. C, not being Ł-related has no such effect.

But in Irish evidence from phrasal movement shows clearly that the predicative phrase in initial position is, in fact, not an island .9 Nominal phrases and PP's are opaque to movement in a general way in Irish (McCloskey (1979)) and so NP and PP predicates are unrevealing in the investigation of islandhood in copular structures. No such difficulties obtain in the case of AP, though, and we can point to examples like (43), involving clefting of the complement of an AP-predicate:

(43) Is liomsa is cosúla \_ é.

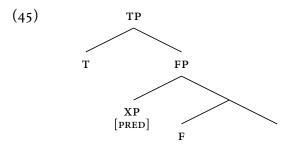
COP.PRES with-me C.WH+COP.PRES like.COMPAR him

"It's me that he most resembles."

The other experiment which can usefully be run involves unaccusative adjectives which take CP-complements (cases like (16) above). These adjectives allow WH-movement of phrases from within their complements straightforwardly and without impairment, as is shown in (44). In (44a,b), the copula clause constitutes the matrix environment and its adjectival head in turn embeds a finite CP-complement. In (44c) the copular clause is itself the complement of a bridge verb and its head selects a nonfinite clause. Note that all three examples exhibit the much-discussed successive-cyclic complementizer alternations which are the distinctive signature of WH-movement in Irish.

- (44) a. an rud a ba chinnte a rachadh \_ ar sochar dúinn the thing c.wh cop.past certain c.wh go.cond on benefit to-us "the thing that was certain to benefit us" ACO 179
  - b. údar is deimhin a thaitneodh \_ liom author c.wh+cop.pres certain c.wh please.cond with-me "an author that it is certain I would like" MCS 53
  - c. an t-aon rud a shíl sé féin a b' fhiú \_ a innse the one thing c.wh think.past he-himself c.wh cop.past worth tell.non-fin "the one thing that he himself thought was worth telling" SB 10

Predicate fronting in Irish, then, if it exists, must target a specifier position below  $\tau$ , for which questions about islandhood are helpfully unsettled.



In the structure in (45), XP will perhaps not be expected to be an island (in virtue of its

<sup>&</sup>lt;sup>9</sup>See Chung's paper in the present volume (especially section 3.2) for a larger discussion of this general issue.

relation with the L-related head T), and T will be the target for the head movements discussed in the first half of the paper. But if this much is correct, then predicate fronting is not EPP-driven, and questions arise about the nature and identity of the category F in (45).

The observations in (43) and (44), which demonstrate legal extraction from within the predicate xP, raise what seem to be fatal difficulties for the third option considered above: namely that predicate fronting is adjunction of the predicative phrase to the attracting head (the copula). A-movement from within a complex head should not be possible. And if the head movement argued for in the present paper is to be possible, then excorporation must be tolerated as a theoretical possibility. But such a move would be, in turn, very much at odds with the principal arguments in favor of head-adjunction (see especially Carnie (1995) and Carnie (2000)), since they are based on observations suggesting that the material within the fronted predicate is inert for further morphosyntactic operations (because trapped within a word or word-like syntactic object).<sup>11</sup>

The point we are then brought to is this. Along one analytical path, there is no predicate fronting in Irish at all (for verbal or for non-verbal predicates). Rather, rightward specifiers are possible and appear in at least some nonverbal predication structures, as in (39). The word order facts and the binding facts fall into place with no additional assumptions or machinery. The head movements that must be appealed to are bog standard, involving adjacent positions in an extended projection undisrupted by phrasal movement. It would be natural in this context to assume that verbal predicates also have rightward specifiers. Since it is known that subjects of verbal clauses raise out of VP in Irish in the general case (McCloskey (1996), McCloskey (2001)), the question of what their base-position is is not determinable by inspection alone. Following this path, the question of how the possibility of initial predicates might be related to verb initial order becomes the question of why verb initial languages might tend to have rightward specifiers. In a certain sense, of course, the question is trivial – if there is verb raising to T, and if T has its specifier on the right, then what we have is a verb initial, subject-final language, not a vso language.

Along the other analytical path, predicates undergo leftward phrasal movement, but not

The example upon which Carnie's argument is primarily based—Carnie (2000): (30b) p. 76—is indeed very ungrammatical, but it involves a number of complicating factors, only some of which I understand. The second argument is based on the ellipsis phenomenon dealt with in some detail in the first half of the paper. Carnie has re-thought the proposals in more recent work.

 $<sup>^{10}</sup>$ See Carnie (2000): 71 – 73 for additional arguments against the idea that predicates front to the specifier of TP.

<sup>&</sup>lt;sup>11</sup>We are left then with the challenge of accounting for the evidence that Carnie has adduced in favor of the head-adjunction proposal (see Carnie (2000): 73–81). There are two principal arguments. The first is that predicates are islands for extraction in a very strong sense – in that they disallow not just movement out but even binding in (binding of a resumptive). We have just seen, though, that AP-predicates at least are not islands for movement. NP's in general (argument and predicative) disallow movement beyond their borders, but binding of a resumptive into a nominal predicate is clearly possible:

<sup>(</sup>i) fear ar col ceathrar dó mo mháthair man C.PRO+COP.PRES cousin to-him my mother "a man to whom my mother is a cousin"

to the specifier of TP, and not under EPP pressure and not to an adjoined position. To get the binding effects of (40)-(41), the fronting should probably be taken to be an instance of phrasal  $\overline{A}$  movement. An idea one might well pursue (suggested by Diane Massam at the Tucson workshop) is that there is a quite general requirement (or tendency) for predicative xP's to raise to a position to the left of their subjects. The problem of how to ensure that everything but v evacuates vP in the case of verbal clauses remains unsolved (as far as I can tell) and, since we still need to appeal to head movement to deal with the facts considered in the present paper, the role of predicate fronting in accounting for verb (and adjective) initial order is diminished. Whether or not all of this can be made sense of in a reasonable theoretical context is unclear to me. If this path is pursued and if the arguments for a head movement step developed in the present paper are sound, then our theory must allow head movement out of a phrase which has undergone phrasal movement to an  $\overline{A}$  position. This, it seems to me, is an outcome which should give rise to some discomfort.

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